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ABSTRACT

This paper describes one model of school reconstruction, which includes a professional development school, being implemented at Celebration School in Celebration, Florida. The description highlights the educational practices and daily learning experiences of students at Celebration. The narrative provides a picture of the philosophical foundation and direction that the school's founders intended it to take. The community is a new town in which all homes have been prewired for technology. The school is divided into upper and lower school neighborhoods, with neighborhoods containing K-5 students on the first floor, and 6-12 neighborhoods on the second floor. Classrooms are referred to as neighborhoods where a community of learners work, create, and discover together. In each neighborhood, approximately 100 multiage students are taught by 4 to 5 full-time teachers, a teaching assistant, and many adult volunteers. The school's philosophy stresses that everyone can learn, and that experiential learning is essential. Emphasis is placed on solving real-life problems, and students are considered partners in the learning process. Cooperative learning is important at Celebration, and the educational environment acknowledges students' multiple intelligences. The local community and the world are explored as part of the learning environment. Other characteristics of the school are described. (Contains 21 references.) (SLD)

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# Learner-Centered Theory in Practice: Challenges of Implementation at Celebration School

## A Qualitative Description of the Intellectual and Social Life of a Celebration Neighborhood

**By**

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**Paper presented at the 1999 Annual Meeting of the American Educational Research Association**

Over the past few years a great deal of attention has been given to the restructuring of schools including the preparation of future teachers. The attention on school restructuring has been quickly moving from the conceptual to the practical level as many public school districts first investigate best practice ( Zemelman, Daniels, & Hyde, 1993) and then develop conceptual models and venture into implementing those models in public schools. The attention on better preparation of future teachers has centered on an effort to invent and establish professional development schools (The Holmes Group, 1986, 1990, 1995; Stedman, 1996).

Restructuring applies to any effort to change the fundamental structure of the education system in order to create conditions in which all students can achieve at higher levels. The structure includes such elements as curriculum, teaching, testing, management, budget, schedules, roles and responsibilities, relationships, incentives and other practices, policies and procedures that define school and district working environment (Darling-Hammond, 1994).

According to Darling-Hammond (1994) "a major aspect of the restructuring movement in education is the current effort to invent and establish professional development schools (PDSs). PDSs aim to provide new models of teacher education and development by serving as exemplars to practice, builders of knowledge, and vehicles for communicating professional understandings among teacher educators, novices, and veteran teachers. They support the learning of prospective and beginning teachers by creating settings in which novices enter professional practice by working with expert practitioners, enabling veteran teachers to renew their own professional development and assume new roles as mentors, university adjuncts, and teacher leaders. They allow school and university educators to engage jointly in research and rethinking of practice, thus creating an opportunity for the profession to expand its knowledge base by putting research into practice--and practice into research."

The Education Commission of the States in a 1991 paper "Restructuring the Educational System: A Consumer's Guide, Volume 1, suggested four main reasons why fundamental, comprehensive redesign of the states' school systems is needed. Those reasons include:

1. New types of students. Today's schools are serving a more diverse population than their current design effectively allows.

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2. New social and economic demands. The American economy has changed rapidly. A rapidly changing job market calls for new kinds of knowledge, skills and attitudes and much higher levels of literacy than ever before.

3. New knowledge about learning. In the last 30 years, researchers have learned much about the nature of human learning that throws into question a number of current educational practices. Research shows, for instance, that learning should be an active, engaging, collaborate process.

4. The current education system is not producing satisfactory results. Evidence abounds that unacceptably large proportions of students do not know what they need to succeed in the future, do not understand much of what they learn in school, cannot apply that knowledge in their daily lives, do not respect learning and have not learned how to learn. There is also evidence that disproportionate numbers of poor and minority young people receive educations of little benefit to them or society.

If public schools are to change then the way teachers are prepared to work in those schools must also change. Reform in schools is inextricably intertwined with reform in teacher education. Efforts at change must be grounded in the reality that teachers, students, and administrators face every day (BellSouth Foundation, (1993). This reform of education and of teacher preparation can only take place in the context of a total commitment to the reform and restructuring of schools.

This paper describes one model of school reconstruction, which includes a PDS, currently being implemented at a school called Celebration, located in Celebration, Florida. The purpose is to highlight the educational practices and daily learning experiences of Celebration Students. Data for this descriptive narrative were collected over one academic year using case study and ethnographic techniques. The researcher took a participant-observer role in data collection, writing fieldnotes, videotaping learning experiences within neighborhoods, and interviewing, both formally and informally, students, teachers, parents, and administrators. These sources provided an enormous amount of raw data to analyze and synthesize into a descriptive report that illustrates a dynamic, process oriented learning environment that is conducive to student-centered learning.

The narrative included here is intended to provide the reader with a picture of philosophical foundation and direction the schools's founders intended the school to take. The short descriptive statements included at the beginning of most of the headings come directly from Celebration School materials designed to provide parents with information about the school.

**The Community of Celebration**

The town of Celebration is located in Osceola County, Florida. The town includes an 18 hole golf course, the Celebration Health Campus (a 60 acre health center owned and operated by Florida Hospital), a 109 acre Celebration Place Office Park, and a downtown area that includes a two screen movie theater, restaurants, retail shops, a grocery store, post office and a town hall. And, in the middle of the community, Celebration School.

The town sits on a small lake and the community will eventually hold up to 8,000 houses. A mix of six architectural styles were selected for the initial homes at Celebration including Classical, Victorian, Coastal, Colonial Revival, Mediterranean and French. All homes built in Celebration are pre-wired for technology. A park, with a walking/jogging trail, a playground, and

swimming pool are located alongside the lake. The playground sidewalks are imprinted with plant leaves from the surrounding area. The swimming pool serves the community and the school as Celebration students use the pool for wellness classes. The high school swim team can be seen practicing in the pool beginning at 7:00 A.M. each morning during swim season.

Everything in the town of Celebration is new. The golf course, the roads, the landscaping, many of the trees, the compact town center that smacks of small towns of yesteryear. Main street in downtown Celebration is paved with brick and lined with palm trees and specialty shops. The downtown area includes a bank, grocery store, coffee shop, and several upscale restaurants and stores. Rocking chairs line the boardwalk between downtown and the lake. In the middle of the community is located the Celebration School Campus.

**Celebration School Campus**

The Celebration School campus, which is part of the Oceola Public School District, currently includes six buildings--administrative, music/art/media/food service, three neighborhood classroom buildings and a gymnasium. The gymnasium is located across a small wetland area. The nature habitat is protected by the State of Florida, so a raised walkway connects the gymnasium to the rest of the campus. The gymnasium is surrounded by a softball and baseball field, soccer field, three tennis courts and a site for a track.

The classroom buildings are divided into upper and lower school neighborhoods. Neighborhoods containing K-5 children are on the first floor and 6-12 neighborhoods are on the second floor. A covered play area has been constructed for outdoor wellness classes and a playground is being planned which will stretch the length of the campus.

Students spend much of the day in their neighborhood classrooms but also travel to other parts of the campus. All students have the opportunity to participate in classes in wellness, art, and music in well equipped facilities. Dance classes are offered to each lower neighborhood. Art students can throw pottery and then have it baked in the kiln while band and chorus students are having classes across the hallway in state of the art music facilities. The Black Box Theater is used by students to conduct plays and have assemblies and is also used by community groups for a variety of performances.

Visitors to the school first enter the administrative building located at the center of campus. The building contains administrative offices, a copy and supply room, teacher's lounge, large meeting room and smaller conference rooms, a student store, and a two bed nurse's office. As visitors enter the administration building they are greeted by a receptionist. A computer sits on the receptionist desk complete with information assisting visitors to make a computer generated name tag. Visitors simply type their name and affiliation into the computer and a name tag is generated. For regular visitors, teachers, and children, a photo ID card is provided. These ID cards enable students to check out books from the media center and purchase lunches.

Classrooms at Celebration are referred to as neighborhoods where a community of learners work, create, and discover together. A neighborhood is a 6000 square-foot space where approximately 100 students are typically taught by four to five full time teachers, a teaching assistant, and numerous adult volunteers. This neighborhood space is divided into smaller classrooms and work spaces. Neighborhoods are multi-age with a lower school classroom containing students ages 5 to 11 or kindergarten through fifth grade. Middle school

neighborhoods place students together who are 11 to 13 and 13 to 15. The high school neighborhoods are for 15 to 18 year-old students.

**The Celebration Educational Philosophy**

The educational philosophy at Celebration School cannot be fully described without first mentioning the groups of stakeholders that make up the learning community at the school. Celebration School is the fulfillment of many dreams and the culmination of many years of planning. The school has been in the planning stages since the early 1990's when the Osceola County School District and representatives from the corporate community and several universities began discussing the creation of a school based on best practices in education. In addition, community leaders and especially parents took on a variety of roles in the early development of the school. Inclusion of this large group of stakeholders in the decision making process at the school truly makes Celebration School unique as not just a school but a community of learners dedicated to creating a quality educational experience for all students.

In addition to this role, Celebration has been established as a Professional Development School. Professional Development Schools (PDS) are partnerships between schools and universities with the purpose of "enhancing the quality of schooling, through research and development and the preparation of career professionals in teaching (Holmes Group, 1995)." The PDS at Celebration is unique in that four universities--Stetson, University of Central Florida, Johns Hopkins University, and Auburn University cooperate to provide input into the development of the school. Each university also provides interns that assist Celebration teachers in instruction and assessment of Celebration School students. University interns are an important part of the school's learning environment. These students gain valuable experience as beginning teachers while supporting the work of Celebration teachers in creating a learning environment that supports the child-centered philosophy of the school.

**What is the basic philosophy of Celebration School?** Teaching and learning at Celebration reflect beliefs initially defined by a committee of Osceola County educators and community collaborators, along with the Celebration Learning Design Team, after much consultation and collaboration with educators at all levels from throughout the country. Most schools develop philosophical documents and statements that help to direct teaching and learning at a school. Many schools, however, place those philosophical documents in a file cabinet or on a shelf where the belief statements are not reflected in daily educational practice. At Celebration, the philosophy and educational beliefs are daily reminders of the educational direction set forth by founders of the school. The philosophy is a living document, displayed throughout the school and community as a reminder of the responsibilities students, parents, and teachers have in becoming lifelong learners. Fifteen tenets form the foundation on which the teaching and learning design of Celebration School is built. These principles include:

1. **Everyone can learn.** We believe that all individuals are "differently abled." The Celebration School community of learners is designed to permit appropriate learning experiences for everyone.

2. **Experiential learning is essential.** Learners optimize understanding through active

participation in the learning process.

3. **Education prepares learners for solving real life problems.** Learners receive instruction and practice in the strategies and techniques of problem finding and problem solving in the complexity of the real world.

4. **Critical and creative thinking are essential for success.** Learners develop the ability to gather, analyze and evaluate data in the dynamic world.

5. **Integrating the curriculum increases its relevance.** It is imperative that learners participate in experiences that demonstrate the relationship of subject matter. Integrated learning experiences heighten the relevance subjects have to one another, and to learners as individuals.

6. **Conducting research into the effectiveness of the learning environment is an ongoing process.** Celebration educators engage in reflective practices; they are committed to quality assurance, continuing action research and professional collaboration.

7. **Continual personal and professional growth is vital.** A wide variety of personal and professional development opportunities are available in Celebration School and the Teaching Academy.

8. **Learning is a life-long process.** All learners develop a love for learning that fosters health and wellness, intellectual and aesthetic growth throughout their lifetimes.

9. **Education is learner-centered.** A personalized education accommodates varied learning styles and alternative ways of gaining knowledge and expressing oneself.

10. **Technology is essential to education.** The incorporation of existing and emerging technologies can enhance and enrich learning.

11. **Education can actively link the community.** All members of the community are both teachers and learners in the educational process.

12. **Successful organizations are based on principles identified by the community.** A community of learners generates its own energy and creates a management system consistent with those values.

13. **Students are partners in the learning process.** Students have the opportunity to contribute to the development, evaluation and refinement of curriculum, and to assist in the evaluation of its effectiveness.

14. **Assessment and evaluation are critical steps in the learning process.** Assessment and evaluation reflect the learning goals set forth in personalized learning plans and professional development plays, and are closely aligned with both curriculum and the instructional strategies.

15. **A safe learning environment encourages inquiry and promotes growth.** Learners are encouraged and guided to take risks, explore, discover, question, examine, and to evaluate ideas, interests, and concepts. Such learning requires a safe, supportive, nurturing environment where collaboration and relationships are cultivated.

**Celebration Organizational Structure**

Celebration School has designed the learning environment to incorporate philosophical principles into the daily learning experiences of Celebration students. At Celebration School the educational decisions made by and for learners are defined by the organizational elements of the learning environment, multiple intelligences, multi-age neighborhoods, inclusion, personalized learning paths, cooperative learning, authentic learning (curriculum), authentic assessment (grading), flexible scheduling, embedded technology, teaching and learning teams, and professional collaboration.

**Learning Environment**

> **The learning environment includes the school environment, the local community, and the world through direct contact, or electronic means. Many learners participate in service learning projects. Learners have opportunities to apply what they have learned in apprenticeships with local business people. The more learners engage in this participative universe, the more they can access its potential and become better educated.**

The entire world is considered the learning environment for students at Celebration School. In order to be successful in a technological society the philosophy is that students must understand the world around them. The learning environment is not confined to what is inside the walls of the neighborhood, or even to the large Celebration campus. Students are expected to go beyond the school boundaries to explore and learn about their world. Learning experiences and activities are designed so that students can explore the outside world. Daily access to the Internet is one way the students learn about their world. In addition, many special speakers come to the school on a weekly basis and upper level students often travel away from campus.

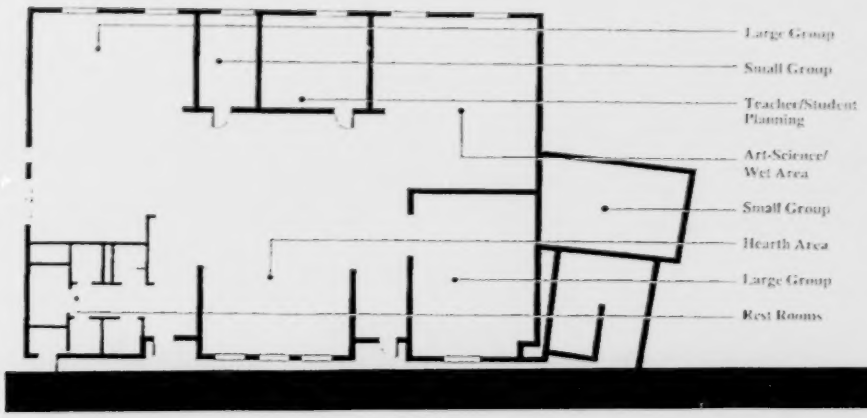
For example, if students are studying about space and want more information they may arrange for an astronaut to visit the school or travel to Cape Canaveral for extended study. Students who are interested in nursing might have a doctor or nurse visit the campus and then travel to a local hospital and view nursing procedures in an operating room. Students participating in a project to stock a local lake might first visit the lake, then gather information from the media center and the Internet, then meet off campus with local aquatic scientists.

**The Neighborhood Environment**

Even though students frequently leave campus for educational projects, they spend much of their time in the classroom neighborhood. A neighborhood is a 6000 square-foot space where approximately 100 students are taught by four to six full time teachers, a teaching assistant, and numerous adult volunteers. University interns are also present in many neighborhoods. This neighborhood space is divided into smaller classrooms and work spaces. Each of the 10 neighborhoods contain open and closed spaces to maximize flexibility, and permit teachers and students to manage their own time and space.

The illustration of a Celebration School neighborhood provides readers a picture of the structure of a neighborhood classrooms. As students enter their classrooms they find an open hallway with lockers to one side. There are lockers spread throughout the neighborhood. All lockers have locks on them but students do not use the locks as an atmosphere of trust and responsibility exists in all neighborhoods. Storage cabinets above the entrance lockers are for students to store skate boards, roller blades and other items too large for the lower lockers. Walls in the neighborhood have been painted a soft yellow color and cabinets are a Mediterranean blue. Floors alternate between a yellow, blue, and white speckled tile in the high traffic areas to a light blue carpet in the areas where children may be asked to sit in groups on the floor. Although there are custodians on campus, children are expected to take the responsibility of keeping their environment clean. A few minutes at the end of each day are spent picking up and arranging the neighborhood for the next day's activities.

## Celebration School Neighborhood





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Neighborhoods have two doors that open to the outside. Each neighborhood has four student bathrooms and one staff bathroom located across from the lockers at one of the entrances. Bathrooms are kept unusually clean by the students. Attendance boards are near the entrance to most neighborhoods as students take responsibility for taking attendance. This way teachers save valuable time for other activities.

Each neighborhood contains a large open space called the hearth area. This area is used for large group meetings and for the neighborhood kiva. Kiva is an Indian term which means gathering. At appropriate times during the day all students and teachers in the neighborhood meet to discuss a variety of topics and concerns. Kiva is typically to talk about the activities for the day. Hearth areas are arranged differently in each neighborhood. Teachers and students spent time discussing and planning the arrangement of the neighborhoods at the beginning of the school year. The structure of the environment in many neighborhoods changes frequently.

At the back of the hearth area two concrete block pillars which serve as computer areas in most neighborhoods. Every wall in the neighborhood has computer outlets and some computers are on carts that can be moved when needed. Computer areas seem to be always busy with students, teachers, and parents working on a variety of projects. Each neighborhood has two large group classrooms, one is a closed space with a door that can be other is more open. The large group closed space is called by many of the teachers the "drafting room" and is used for human expressions activities such as writing. The room contains a listening center and in the back of the room is a counter area with overhead storage.

The large group open space has a variety of functions. The space serves as a work area for many of the students. Learning centers are typically set up in this area. It should be noted that a variety of different sizes of tables and chairs can be found throughout the neighborhoods and are frequently moved to be available for whatever age group is using the space.

In the opposite corner of the neighborhood from the large group area is an art-science/wet area. This area is used similarly to the large group area and contains sinks and a refrigerator. Upper neighborhoods use this area for science experiments or group project work.

Smaller, self-contained classrooms are also located in each neighborhood. For secondary students these rooms have been designed as science rooms. Younger students use the small group rooms mostly for reading and a place to go to work on small group projects. A office area for teachers is located in the back center of each neighborhood. Teachers use this room mostly for planning, both before and after school, as they are seldom there during the school day. Alongside the teacher planning room is another small classroom. This room holds 10-12 students for small group classes. Some neighborhoods use this room as the "imagination room." For others it is a room for reading, small group math games or a space for quiet activities. In the high school neighborhood this room is used as the senior room where seniors can get together for meetings as a group.

**Multi-age Neighborhoods**

**Learners are not placed in grades; they are organized in developmentally appropriate groups that focus on the physical, social, emotional and cognitive needs and interests of the learners in these multi-age neighborhoods.**

Most public school education in this country is organized by age, placing children of the same age into a single classroom. For example, all five year old children are in kindergarten and all twelve year old children are in seventh grade. At Celebration School children participate in their daily activities within groups called neighborhoods. In this environment students stay in a particular neighborhood for several years getting to know peers and eliminating yearly concerns dealing with changing grade levels and teachers. This multi-age organizational structure (see Miller, 1990 for review) differs from the conventional age and grade level structure which has endured for over 100 years and has been based on three assumptions:

- That students of the same chronological age are ready to learn the same objectives
- That students require the same amount of time, as in an academic year, to master predetermined content
- That students can master predesigned objectives for a grade level for all curricular areas at the same rate.

We know that children of the same age do not learn the same objectives in the same amount of time and that the current age/graded systems may be promoting failure for many children. A review of current research indicates that students gain greater educational benefits from multi-age classroom grouping than a single-grade structure. It is important to note that research reveals that grouping by age or single grade levels yields no benefits over multi-age/grade groupings. On the other hand, multi-age grouping can yield benefits for students in the affective domain. The general pattern that emerges from the research suggests increased competition and aggression within same-age class groups and increased harmony and acceptance of diversity within multi-age groups. The multi-age learning community also;

- Helps students act more responsibly for their own behavior and their own learning.
- Is built on continuous progress for students rather than repetition of steps or grades.
- Involves a holistic approach to instruction.
- Is child-centered rather than test-driven.
- Encourages the philosophy of "success teaches success".
- Is designed to encourage collaborative learning (students) and planning (teachers).
- Affords each child the opportunity for success through whole group instruction, small group instruction, and center activities.
- Is based on flexible grouping of children.
- De-emphasizes age and competitiveness.
- Gives children the chance to learn from each other through modeling.
- Is grounded in active learning and exploration.
- Helps to build self-confidence in students.
- Recognizes that children develop at different rates and learn in different ways.
- Fosters positive peer relationships.
- Enables children to seek their own level for learning and social interaction.
- Provides peer tutoring opportunities.
- Provides opportunity for children to challenge themselves to higher level skills.
- Provides a safe and nurturing environment that promotes the physical, social,

emotional, and cognitive development of students.

Celebration is somewhat unique in that it is a kindergarten, elementary, middle, and high school, all on the same campus. Few public schools offer this type of learning environment. It is not unusual to see high school students assisting younger children with a variety of different projects or even, for example, seeing a seven year old student teaching a much older peer about a new computer program.

**Cooperative Learning**

> **Learners engaged in cooperative learning seek to accomplish shared goals that benefit everyone involved in group learning experiences. Essential components focus on positive interdependence, promotive (face to face) interaction, individual accountability and personal responsibility to achieve the group goals, interpersonal and small group skills, and group processing to improve future effectiveness.**

One of the basic goals of a Celebration education is to prepare students to work and be productive in a technological world. Understanding the importance of cooperation is a key ingredient to being successful. Cooperation can be defined as working together to accomplish shared goals. In school, cooperation is the use of small groups so that individuals work together to maximize their own and each other's productivity and achievement. Thus, an individual seeks an outcome that is beneficial to him or herself and beneficial to all other group members. In cooperative situations, individuals perceive that they can reach their goals if and only if the other group members also do so.

This practice of cooperative learning can be seen in action on a daily basis at Celebration school. The emphasis on cooperative learning at Celebration is a major philosophical shift from many competitive based, conventional schools. In many schools today students are encouraged to work and learn as individuals, competing with classmates to get the best score on a test or to write the best paper. At Celebration students cooperate with each other to better understand the material they are studying and to create quality projects as a group. This is very similar to how adults work. The boss may give an individual a project to complete but in order to have the highest quality project that person consults and participates with a variety of others with different expertise to help develop the final product. The question is not whether we should develop a cooperative learning environment for children in schools, the question is how should it be done.

In many of the neighborhoods at Celebration the words "Respect, Responsibility, and Right To Learn" have been placed in big letters on the classroom walls. These are not simply words on the wall but a direction for how students will work and learn with each other on a daily basis. In order to have a cooperative learning atmosphere students must first understand that each individual has the right to be respected for who they are and for what they bring to the educational environment. Each student brings unique and different skills and knowledge to the group working environment and should be respected for the diversity of those skills and knowledge.

The second element of this cooperative learning environment, and maybe the most important single concept within the philosophy of the school, is the idea that both children and

adults are responsible for their own learning. Celebration School does not promote a top down approach to learning where teachers provide information to students and then students learn the information and recount their knowledge on a test. Students at Celebration have control of their learning and share responsibility for making decisions about the direction their studies should take.

For example, in many schools all second grade children in the school would learn to spell the same weekly spelling words. At Celebration, the teachers and individual students collaborate together to select which words are most appropriate for the developmental level of the student. It would not be uncommon for children in a particular neighborhood to all have different spelling lists during any particular week. Although this is only one example of the concept of student responsibility for learning it illustrates the expectations placed on students at the school. It is not the teachers responsibility to simply teach, providing information from designated textbooks, it is the students responsibility to have a role in making decisions on what kinds of information will be explored and investigated. It is the responsibility of the individual student to take an active role in making decisions about the direction of his or her own learning.

Teachers within this responsibility model must be prepared to take on the challenges of working with a group of children who are not all on the same page in the same textbook. Teachers are facilitators of knowledge, working side by side with students to assist them in accessing the information they need in order to meet the standards they have established for themselves. Teachers also have the responsibility to stay current on educational practices and understand how to access knowledge needed by students.

Having respect for peers and developing the concept in students that they are responsible for their learning helps to instill in all students the concept that everyone has the "right to learn". This third element of the cooperation model helps to ensure a positive working environment. Students who understand that in order to be successful in this environment that they must respect others, take responsibility for their own learning and for cooperating with others to maximize their own and peer learning, understand that they must also provide others with the right to learn.

When observing a Celebration neighborhood adults immediately pick up on the lack of any major discipline concerns. Students move from learning centers, to computers, to small and large group activities, and travel around the campus, in an appropriate manner because they understand that everyone has the right to learn within a quiet, positive environment. If a conflict does occur students are directed to discuss the incident and first see if the problem can be solved by those involved. If that does not work the teacher or even non-involved students serve as mediators to settle disputes. Working in a multiple intelligences environment requires students to develop their interpersonal skills and be able to cooperate with others to settle differences and help create an environment where everyone cooperates, collaborates, and is provided the right to learn.

**Multiple Intelligences**

> **All learners have talents and skills in linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, naturalist, and existentialist intelligences. Learners can maximize their development in each of their intelligences as they use their minds to make sense and represent what they have learned. It is important for educators to identify different strengths as they observe learners and**

**guide individual continuous learning.**

Multiple Intelligence Theory

Celebration School, in part, is based on the Multiple Intelligences Theory (Gardner, 1993; Armstrong, 1993) as developed by psychologist Howard Gardner. Although the idea of multiple intelligence is a revolutionary idea it has gained increasing respect from both scientific community and the general public. The theory challenges many of the old beliefs about what it means to be smart. The theory suggests that our culture has focused too much attention on verbal and logical thinking (these are the things that most IQ tests assess) and has neglected other ways of thinking and knowing.

By definition intelligence is the ability to respond successfully to new situations and the capacity to learn from one's past experiences. Intelligence depends upon the context, the tasks, and the demands that life presents to us and not on an IQ score or a college degree. The theory originally suggested that there are at least seven intelligences and that everyone actually possesses all seven. An eighth intelligence has been added to Gardner's original work. This additional intelligence relates to the love and understanding of nature. In the past schools have mostly emphasized language and math/science learning because those were the things that were tested on IQ tests. At Celebration school an effort has been made to provide for students to emphasize the opportunity to understand their individual interests and abilities within each of the seven intelligences. This emphasis on all of the intelligences helps students to discover individual talents.

A school, such as Celebration, which is based on the multiple intelligence theory simply looks different than the conventional school that emphasizes math and language. All seven intelligences receive similar emphasis, especially at the elementary level. Although students are provided learning experiences in all of the multiple intelligences throughout their school years, as they move to the secondary level (middle and high school) they begin to emphasize the areas where they have discovered they have individual interests and abilities. It would not appear unusual at the secondary level to have one student emphasizing study in the linguistic and musical areas while another might emphasize study in the logical-mathmatical, spatial, and interpersonal areas.

**Personalized Learning Paths**

**Personalized learning paths outline objectives, goals and experiences for every learner, and record the student's progress throughout their Celebration School experience. The path is developed by the parent, student and educators who share in the responsibility for continual growth. This does not mean that every learner will be doing something different, but individual differences and desires will be taken into account in planning the learning experiences.**

Ideally, personalized learning paths are initiated with family members and the educators who work with the learner. The interests and needs of the student and the expectations of excellence are identified and recorded. A personalized learning plan is an on-going process that focuses on learning experiences that reflect relevant, rigorous learning for every learner on the K-

12 Celebration pathway.

One way students help to insure movement toward personalized learning is through the development of educational goals. All students at celebration spend time writing goals. Some goals are written daily to provide students with a mind set and the challenge of "this is what I am working to accomplish today." Students can be observed sitting down with their notebooks at the beginning of the day and writing down specific goals that they would like to accomplish. Students also establish weekly goals and quarterly goals. Secondary students, especially seniors develop yearly goals that center on presenting a culminating project of excellence known as a Senior Exhibition. At the end of each school day, students can be seen, again writing in their notebooks, reflecting on progress toward accomplishing their goals.

**Vital Results**

Vital Results are the process skills necessary for students to understand and interpret the curriculum and to work cooperatively with others. Vital results are part of each student's Personalized Learning Plan and focus on "how to learn" as opposed to "what is learned." These skills are part of the curriculum and are assessed just as achieving state standards are assessed. Vital results have been divided into four areas and refer to communication, personal development, reasoning and problem solving, and social responsibility skills that assist students not only in learning and understanding new information but, also, in collaborating and getting along with others in a diverse learning community.

In the area of communication every student with a common core of knowledge and skills learns to listen actively for a variety of purposes, express him/herself with power and purpose, read with understanding, read critically, write effectively, use the tools of information technology to communicate, and use a non-native language to communicate and gain insights into other cultures. In the area of personal development every student with a common core of knowledge and skills develops a sense of unique worth and personal competence, learns to make healthy choices, makes informed, ethical decisions based on personal beliefs and values, develops productive and satisfying relationships with others, and demonstrates the skills necessary to participate in the workplace.

In the area of reasoning and problem solving every student with a common core of knowledge and skills chooses and uses effective means of solving problems, applies logical strategies to solve problems, approaches new situations with an open mind, healthy skepticism and persistence, and thinks abstractly and creatively. In the area of social responsibility every student with a common core of knowledge and skills learns by serving others and knows the rewards of giving one's energies for a larger good, respects human diversity as part of our multi-cultural society and world, understands how change occurs, how to create it, and how to deal with it successfully, acts out of respect for all forms of life, and takes steps to protect and preserve the environment. At the end of each quarter teachers provide written narratives assessing the progress of students in each of these areas and students provide evidence of progress toward vital results in their portfolios.

**Authentic Learning**

**Learners understand best when they encounter real ideas, events, and**

**new knowledge in meaningful contexts, not by studying isolated subjects in separate blocks of time. An authentic learning model provides coherent connections between knowledge and life.**

Learning at Celebration School is based on assisting children to meet rigorous academic standards developed by the State of Florida. These standards are referred to as the Florida Sunshine State Standards and they specify what students should know and be able to do within each academic content area. State Standards include the knowledge and skills--the ways of thinking, communicating, reasoning, and investigating, and the most important enduring ideas, concepts, issues, dilemmas, and information that characterize each content area.

For example, a math content standard for elementary students in the State of Florida is to be able to add and subtract numbers. Within the curriculum at Celebration elementary students are involved in a variety of learning experiences that assist them in understanding the concepts of addition and subtraction. Test scores after the first year of operation at Celebration school indicate that students are certainly meeting and even going beyond understanding the content associated with meeting the state standards in math.

Many schools throughout Florida, and throughout the country, take a very direct approach to helping children reach state standards in all content areas. Some school systems have decided that students should meet state standards by working through pre-selected textbooks which systematically take students through predetermined learning experiences in order to reach the standards. This commentary is not intended to judge whether that is an inappropriate or appropriate method of providing content to students. The Celebration philosophy, however, has been not to pre-select textbooks or take the conventional approach of providing students with information on a topic, having them learn the information, and then asking students to be tested to see what they may have learned. The Celebration approach has been to focus more on the process of learning and understanding, organizing content based on themes, not on content areas, and then present understanding based on a completed project and use a portfolio approach to assessment.

Several terms have been used to describe the curriculum at Celebration School. These terms include "developmentally appropriate curriculum," "theme based curriculum," "project based curriculum," and "problem based learning." Although these terms define different ways of presenting and organizing the curriculum they are not new. However, the terms have become popular in defining what goes on within an "authentic learning" environment.

The concept of **developmental appropriateness** has two dimensions: age appropriateness, and individual appropriateness. Teachers use child development knowledge to identify the range of appropriate behavior, activities, and materials for a specific age group. This knowledge is used in conjunction with understanding about individual children's growth patterns, strengths, interests and experiences to design the most appropriate learning environment and learning experiences. Human development research indicates that there are universal, predictable sequences of growth and change that occur in children as they grow and mature. These predictable changes occur in all domains of development--physical, emotional, social, and cognitive (Bredekamp & Copple, 1997).

If age appropriateness were the only stipulation of a developmentally appropriate

educational experience we could place all 10-year-olds in a classroom and teach them all the same thing at the same time. But, the second stipulation, individual appropriateness, mandates otherwise. Each child is a unique person with an individual pattern and timing of growth, as well as a individual personality, learning style, and family background. Learning is a result of interaction between the student's thoughts and experiences with materials, ideas, and people. It is not unusual to observe students at Celebration working at a variety of different developmental levels. A seven year old, second grade child, for example, may be on an emotional level with other second grade peers while being in a reading group with eleven year old children and in a math group with five-year-olds. This concept is not applied only to elementary children. The concept of developmentally appropriateness also applies to middle and high school students. Certainly, many 16-year-olds are ready for the responsibility of driving a car, others are simply not ready even though they are at the legal age to do so. A learning environment that is open enough to allow for individual differences of middle and high school students is one that helps students be successful. The multi-age structure at Celebration School allows for individual differences among students providing for a child directed, child centered learning environment.

**Authentic learning** (Cushman, 1997) refers to a curriculum which allows students to learn in the real world by studying real events and new knowledge in meaningful contexts--a hands on approach to learning. Unlike a conventional classroom where students study isolated subjects in separate blocks of time students at Celebration work with the world as their classroom. For example, students might study the ecology of a lake by traveling to the lake, taking water samples and collecting plant life, which they intern take back to the science lab and place under the microscope for further study. Or, if studying North American Indians, students might travel to an Indian Reservation or have a special guest speaker discuss Indian culture as students participate in Indian dances handed down from generation to generation. An authentic learning environment provides students with connections between knowledge and everyday life.

Within a authentic learning environment a theme based curriculum refers to the concept that children learn best when studying the world as it exists and not by compartmentalizing learning into subject area blocks. A **theme based curriculum** demonstrates to children the interconnections between the different subject areas of math, science, language, art, music, and history. For example, a theme for a particular neighborhood for a nine week period might involve studying the rainforest, North American Indians, the ocean, or the human body. If studying the rainforest learning experiences might center around looking into the history of a particular forest, studying the different species of wildlife and the balance of nature, along with investigating cultural and economic concerns. Students may also write stories, and conduct science experiments related to how plants grow in the rainforest. A theme based curriculum truly provides students with a more comprehensive view of the world in which they live.

Within the theme based curriculum students are asked to participate in a variety of projects which focus on a specific aspect of the theme. Well designed projects help students focus on an interesting aspect of the theme in more detail. Projects can be completed by individuals or are completed by students in small groups. These small groups of students take on the responsibility of working together to develop and complete projects that are more detailed and accurate than if students worked alone. Each student within the group works to provide his or her part of the project based on individual interest and skills. Students collaborate with each other

to learn new information, synthesize knowledge and develop quality projects. Project groups change over the course of the year and students learn how to cope with the responsibility of learning and producing with a group of peers.

A term synonymous with project based curriculum is "**problem-based learning**" (Checkley, 1997). Students are provided with open-ended projects and questions within those projects that focus on real-world problems as the context for an in-depth investigation of content. The problems students have to tackle are ill-structured--meaning they include just enough information to suggest how students should proceed with an investigation, but never enough information to enable students to solve the problem without further inquiry. These problems cannot be solved by using only formulas--students must use the inquiry process and reasoning. There may be more than one way to solve the problem. Teachers, when using a problem-based learning approach become tutors or coaches, helping students understand their own thinking and guiding them as they search for new information. Through problem-based learning, students become better problem solvers because they develop skills such as reasoning, collaboration, and persistence in their self-directed search for solutions.

For example, one neighborhood of middle school students and teachers at Celebration jointly decided to study hurricanes. Within this theme a number of project ideas were developed and students spent much of a nine week period working on group problems. Some groups selected the problem of building a hurricane proof home. They spent time investigating building materials that would hold up in a storm; they got information about the foundation that should be placed under a home; they studied the history of storms and sought out information about insuring a home against hurricanes; they studied wind velocity and even called the local building permit office to get further information. In the end, some groups developed computerized sketches of the hurricane proof home, others built and tested home models. Other projects included researching the safety of animals during storms and how news corespondents report the news about storms.

A project based, problem based curriculum involves individual students, or teams of students, who choose topics related to a question, a problem, or an interest and engage in learning that is relevant and challenging. Although projects are not always intended as evaluation activities, they do provide evidence of students' abilities and growth over time as one means of assessing understanding.

Within this curriculum content has not been divided into the traditional subject areas of math, history, language, reading, and science but into an instructional format that is more global in nature. The belief is that this structure allows students to create a better understanding of how all knowledge is interwoven. It helps prevent a compartmentalized view of the world. The Celebration School curriculum structure separates content into three broad categories of Scientific Investigations (earth science, mathematics, life science, physical science, as well as algebra, geometry, calculus, trigonometry, biology, chemistry and physics), Human Expression (literacy, language, literature, world languages, visual arts, and performing arts), and Global Exploration (geography, history, economics, political science, cultural anthropology, psychology, and sociology). Each of these categories would be explored through each theme that is studied.

**Scientific Investigations** deal with integrating knowledge and skills from such areas as earth science, mathematics, life science, physical science, as well as algebra, geometry, calculus,

trigonometry, biology, chemistry and physics. Scientific Investigations encourages reflections on the nature of science and the building of new understanding. It includes learning that applies knowledge from earth, life and physical sciences. Mathematics is the currency of science as well as a language of patterns. Mathematics and science are inextricably intertwined as defining tools for uncovering the workings of the universe.

**Human Expressions** integrates knowledge and skills from such areas as literacy, language, literature, world languages, visual arts, and performing arts. Learning in the written, visual and performing arts deepens the search for meaning by connecting learners with the voices of writers, the vision of artists, and the thoughts of philosophers across times and cultures. Insight, perspective and critical understanding, made possible through the arts, help all learners respond to universal paradoxes such as reason and irrationality, hope and despair, life and death, freedom and responsibility, and love and hate. Every learner who explores universal themes by working with a variety of media, and creates responses within the freedom and constraints of the arts and humanities, arrives at a broad-based, well grounded understanding of the nature, meaning and value of the arts as dimensions of humanity.

**Global Explorations** integrates knowledge and skills from such areas as geography, history, economics, political science, cultural anthropology, psychology, and sociology. A deeper understanding of people, time and place emerges as learners encounter geography, history, political science, economics, sociology, and anthropology interfaced in new ways. A learner centered, transdisciplinary curriculum provides regular opportunities for learners to choose issues to investigate in depth, to actively participate in community and global learning experiences, to engage in cooperative learning and independent inquiry, and to explore many cultures. Understanding one's own background as well as studying other cultures helps to prepare students to be life-long responsible citizens of Celebration, Florida, the United States and the world.

It should be noted that within a typical school week at Celebration students spend time working in the areas of Scientific Investigations, Human Expressions, and Global Explorations. Each neighborhood provides scheduled blocks of time to explore these curricular areas and their integration within the theme of study.

**Authentic Assessment**

> **A variety of multi-dimensional assessments are used to gain a richer understanding of each learner's progress and the possibilities for future directions. Projects, performances, demonstrations, and exhibitions reflect each learner's continuous progress. Learners present documentation of learning in real and electronic conferences with educators, families, and mentors.**

Schools are supposed to prepare young people with the skills and knowledge to design and conduct projects and fashion products of value to self and the community. But, in schools, we typically make little effort to show and share, assess, and evaluate the things children make in school. Customarily, our schools treat the work children do as disposable--collect it, grade it, hand it back, and never revisit it (Hatch & Seidel, 1997).

This is not the case at Celebration School. At Celebration assessment is part of the daily

process of learning within the curriculum. Assessment is the process of gathering evidence about a student's level of achievement in a specified subject area and of making inferences based on that evidence for a variety of purposes. Teachers must be able to assess individual achievement, otherwise, it will be impossible to know whether the state standards have been reached.

Teachers at Celebration daily assess student learning with the purpose of evaluating where a student is in terms of his/her learning. In this assessment, however, it is the philosophy of the school that the process of accessing information, analyzing, and creating is as important as the end product of the work. No letter grades are given at Celebration School. The assessment system has been structured to answer questions and provide students and parents with information about student learning. Grades do not answer those questions. Often, when a report card is brought home by a child, all that is communicated is an "A" or a "C". Parents and students are often left to wonder what was actually learned and what do the grades really mean.

It is understood that this kind of assessment process does not mean that students do not take tests or do homework or hand in daily assignments--they do. Students document their learning through rubrics, various work samples, and in real and electronic conferences with teachers, peers and families to plan future instruction and to document growth toward accomplishing state and national standards. The difference in Celebration's assessment and the traditional grading system is in the purpose for gathering the information. Assessment at Celebration provides feedback to students and teachers for the purpose of improving teaching and learning. Traditional grading systems are often used simply for reporting purposes.

The authentic assessment system used at Celebration focuses on the student's continuous progress. Student work is collected on a regular basis into the student's working portfolio. Teachers, along with peers, assess work, make suggestions, and then the student conducts further research or gathers more information and makes additions and corrections based on this feedback. Final products are placed into a show portfolio and assessed based on a quality standard called a rubric, then made available to parents for their review.

Portfolios are used at Celebration School in order for students to display the quality of their work. While relatively new in education, the concept of a portfolio is not new or unusual. The term portfolio suggests images of artists displaying their creative work or models and actors carrying oversized folders of photographs illustrating their modeling work or representing their theater performances. For others, a portfolio may suggest a record of financial investments. At Celebration and in schools across the country portfolios contain collected evidence that document learners' abilities to meet personalized learning goals. Simply, a **portfolio** is a collection of a student's work. A portfolio represents a body of work in each of the domains of Human Expression, Global Exploration, and Scientific Investigations created over a period of time such as a quarter or semester.

The collection of a student's work in a portfolio is the end product of the assessment process. Before work is placed into the show portfolio for review by parents the work is evaluated by the teacher and student and assigned a rubric score. At that time the student and teacher decide whether the work deserves to be placed into the portfolio or whether further study and learning needs to take place. Work is assessed on the basis of a rubric as opposed to being given a letter grade.

A **rubric** is a scale of criteria that explains in detail the possible levels of performance for

a project or task. A rubric is a quality standard which provides students with a goal or challenge to work toward. Rubrics are developed and available before work on a task or project is begun. In this way, students know and understand the quality of work that is expected.
Students and teachers participate in the planning and design of the rubrics. Teachers and learners work together toward demonstration of competence according to detailed standards of learning. Rubrics are specific to expectations of performance. As students progress on the learning continuum, there are descriptors of specific content and indicators of performance. For example, a four point rubric using the levels of not yet, developing, achieving and extending are used as levels for many of the rubrics used at Celebration. Below are two examples of rubrics one for a writing assignment and another for a project. Note that the project rubric uses the rubric levels of Emergent, developing, proficient, and fluent. The title placed on the individual rubric level is only a category of quality. The most important part of the rubric is the descriptive words that help define for students the quality of the work.

In the high school at Celebration a numeric system is used to indicate the rubric levels. One reason for the number system is to help teachers and students determine a grade point average which many colleges use in helping to determine admission. (It should be noted that a high school GPA is less important to being admitted to college than is a good score on the SAT exam. This will be further discussed in section three of this booklet.) Number indicators, i.e., 4, 3, 2, are assigned to rubric indicators and used to evaluate exactly how the student demonstrates performance. A rubric level that would indicate a score of 1 is not listed and is not acceptable for work in secondary subject areas at Celebration. For example, when high school students place work into their portfolios from the areas of human expression, scientific investigation, and global exploration, that work is assessed on a scale similar to the one included below. Numeric descriptors are also used in on-going assessment along with rubrics that detail specific assessment criteria. A category of "W" or Work in Progress has been added for students at Celebration so they can receive credit for work if they transferred out of Celebration to another school.

| | |
|---|---|
| 4 | Work, effort and craftsmanship that consistently exceed the standards of competency (as described in individual rubrics in the specific area of study) based upon benchmarks described in the Sunshine State Standards. When the work demonstrates consistently high standards in craftsmanship and excellence, Honors designation is given. |
| 3 | Work, effort and craftsmanship that consistently demonstrate the standards of competency (as described in individual rubrics in the specific area of study) based upon benchmarks described in the Sunshine State Standards. |
| 2 | Work, effort and craftsmanship that demonstrate the minimum standard of competency (as described in individual rubrics in the specific area of study) based upon benchmarks described in the Sunshine State Standards. |
| W | Work in Progress has been added for students at Celebration so they can receive credit for work if they transfer out of Celebration to another school. |

**Exhibition of Excellence**

As part of the exit requirement to graduate from Celebration School, each senior is

engaged in the process of researching, planning, developing, and presenting a culminating project of excellence known as a Senior Exhibition. Eleventh graders actually begin the process of preparing for the senior exhibition by participating in learning activities that provide experiences from which they can identify areas of academic or vocational interests which will become the focus of the exhibition. Students select a topic in collaboration with parents, teachers and mentors (typically people from outside Celebration School), and a project plan is prepared that details the vision, the learning goals, the plan for achieving the goals, needed equipment and selection of mentors.

The focus of the senior project is to engage each senior in a personalized learning experience. The project allows seniors an opportunity to demonstrate interdisciplinary skills and knowledge while investigating a specialized area of interest. The process is not unlike a master's student at a university doing a thesis. The student selects a projects, conducts research, analyzes data, and reports results. In many instances the senior projects are as elaborate, detailed and comprehensive as would be a masters thesis.

Students are required to provide an essay that documents the process of the project, conduct active research on the exploration of the selected topic, work on the project with an outside mentor, write a self-assessment of the process, keep a project portfolio that includes a history of the project, and participate in a final exhibition where the student presents the final product and defends in exhibition before a review panel. During the 1997/98 school year, for example, students selected projects such as starting a company to develop web sites for area businesses, creating a TV recording studio on Celebration campus, designing clothing and putting on a fashion show, and spending time at a hospital learning nursing skills. The senior exhibition truly demonstrates that the student has completed a comprehensive study of a specific topic.

**Embedded Technology**

**Technology enables learners to experience information in profound new ways that expand their education in multiple ways with the tools of their times. It promotes self-directed, interactive pursuits of understanding and application while providing a showcase for learning. Technological tools support personalized learning, communication, organization and multimedia productions enriching the lives of all learners in the community.**

Perhaps the most profound difference between traditional K-12 schools and Celebration School is technology. With over 700 computers, the latest technology is everywhere, and includes everything from desktop computers to PowerBooks and Emates.

Visitors to the school first visit the administrative building where they are asked to make a name tag following directions on a computer screen. All students have a magnetized photo ID card, made at the school, which allows them to purchase meals in the cafeteria and check out books at the media center. Technology is so integrated into each neighborhood and the school that students can literally access the Internet from anywhere on campus--from the classroom to the gymnasium and from the media center to the cafeteria.

The community of Celebration is also linked as each home is wired for technology. Computer manufacturers Sun Microsystems and Apple Computer along with software companies

URLabs and APUNIX, and system integrators SAIC and Central Data Computer Centers have collaborated to make the Celebration School and town one of the most "wired" communities in the nation. Every child in the school has his/her own access code and e-mail address.

For adults who are unfamiliar with children's use of technology, it is both astounding and exciting to walk into a neighborhood and see 5, 6 and 7 year old children using computers as a tool to help in composing letters and writing short stories; to watch a 10 year old child use a software program and an electronic keyboard to compose music; to observe middle school students using computer software to design hurricane proof homes; or, to watch high school students participate on a video chat line to complete a year long project in collaboration with high school students 500 miles away. And, although somewhat novel and unusual to observe student's competent use of cutting edge technology, it occurs on a daily basis at Celebration School.

Computers at Celebration are used on a daily basis by students to access information in all areas of learning. Students use computers to conduct literature reviews and do research on projects. They have a large variety of software programs to select from including Adobe, Claris Hyperstudio, Avid Cinema, Corel, and National Geographic. Many students have their own Web pages and Web development applications are available to students and teachers alike.

Technology is also being used to assist students and teachers in displaying student work in the form of electronic portfolios. The school is in the process of moving from a paper show portfolio to being able to display all student work samples in an electronic portfolio. Students scan art work and completed math and science projects into their electronic files, save disk copies of book reviews and other written work, and even record video and audio performances into the electronic portfolio. As in the show portfolio, students select only their best work that documents the achievement of a state standard. The best work samples go into the portfolio matched with the state standard and the rubric level which describes the level of quality the work achieved.

Imagine, as a parent, coming home at night, having dinner with the family, and then going to the computer with your son or daughter to access their portfolio. After reviewing student's work parents would then be able to type in a message back to the teacher asking for more information, clarification, or simply to say "thanks for working with my child."

**Teaching and Learning Teams and Professional Collaboration**

**Collaborative teams, including educators and learners, coordinate and facilitate learning experiences that enhance personal and intellectual development of all learners. The degree to which team members contribute skills and talents to create synergy affects the overall effectiveness of teaching and learning.**

**Educators construct and enhance professional knowledge and skills, engage in action research, and dialogue with other educators as they learn and collaborate within Celebration School or around the globe. This professional growth directly impacts the learning potential in Celebration School.**

The multi-age classroom and the integrated curriculum within that classroom are becoming an increasingly popular way to restructure schools. Teachers in conventional, self-contained classrooms using a traditional textbook curriculum have little need to teach and

collaborate as a team with their teaching peers. They receive most of their information about the curricular objectives of the school from textbooks. Teachers, in the Celebration multi-age, integrated learning environment, spend dozens of hours each week planning with other teachers not only in their immediate neighborhoods but with teachers throughout the school. This collaboration is an important part of working within the Celebration School environment.

No one teacher can be an expert in every curricular area and, therefore, to provide a quality learning experience for all students, teachers must plan together, exchanging expertise with each other to provide quality curriculum. At Celebration this is accomplished in several different ways. Teachers within each neighborhood schedule daily planning sessions to confer with each other on planning of themes and learning experiences, to discuss the structure of the learning environment and suggest any appropriate changes based on the theme, to discuss individual students and their developmentally appropriate needs, and to plan for cross-age learning, small flexible groupings of students, and to plan for assessment.

Teachers meet frequently with teachers from other neighborhoods and from the speciality areas of art, music, band, and wellness to coordinate learning experiences, special speakers and field trips. Celebration teachers meet on a regular basis as a group to discuss school wide matters and/or to participate in workshops. These workshops provide teachers the opportunity to discuss and debate instructional strategies, technology applications and simply share ideas with each other.

At Celebration School, teachers work as teams to plan and facilitate student learning. The environment at Celebration compels teachers to work together to plan the most appropriate experiences for each student. Without this collaboration Celebration School might look like any conventional school where intact classrooms are segregated from each other within a school. Just as students cooperate to share information and learn from each other, so do teachers. Included in this process are university teacher education interns who are provided the opportunity to practice teaching and put in practice what they have learned at the university.

It should be noted that not only does the Celebration School philosophy call for teachers to form collaborative teams of learners but that philosophy is also extended into the community. Parents spend many hours at the school working in classrooms and communicating their thoughts with teachers. Parents are an important part of the Celebration learning community and are considered part of the teaching and learning teams.

**Summary**

This brief descriptive narrative is really about one school's attempt at school reform. Zemelman, Daniels, and Hyde (1992) in their book Best Practice: New Standards For Teaching and Learning In America's Schools, suggest that only recently have we begun "to understand that the basic things we do in American schools--what we teach and how--don't work. We don't empower kids, we don't nurture literacy, don't produce efficient workers, don't raise responsible citizens, we don't create a functional democracy. If we really want to change student achievement in American schools, we must act directly upon teaching and learning. More of the same is not the answer."

Throughout this narrative have been provided examples of some of the educational

changes being made at Celebration School. Over the past ten years there has been a debate in this country as to what form educational reform should take. It certainly would be difficult and almost impossible to come up with a list of specific practices that if implemented would change pubic education for the better. However, most subject matter areas have national organizations which periodically develop and write curriculum standards for their areas as guidelines for teachers. One might expect that when curricular areas such as science, mathematics, reading, writing, and social science define their own field's Best Practices that the result would be some very different visions of the ideal classrooms. But, in fact, this is not the case. Organizations, such as, the National Council of Teachers of Mathematics, the Center for the Study of Reading, the National Writing Project, the National Council for the Social Studies, the American association for the advancement of Science, the National Council of Teachers of English, the National Association for the Education of Young Children, and the International reading Association, have common recommendations for teaching and learning in schools. It is no mistake that the list of common recommendations of national curriculum reports of these organizations are very similar to the practices being implemented at Celebration School (Zemelman, Daniels, and Hyde, 1992)

Common Recommendations of National Curriculum Reports

LESS whole-class, teacher-directed instruction, e.g., lecturing
LESS student passivity: sitting, listening, receiving, and absorbing information
LESS prizing and rewarding of silence in the classroom
LESS classroom time devoted to fill-in-the-blank worksheets, dittos, workbooks, and other "seatwork"
LESS student time spent reading textbooks and basal readers
LESS attempt by teachers to thinly "cover" large amounts of material in every subject area
LESS rot memorization of facts and details
LESS stress on the competition and grades in school
LESS tracking or leveling students into "ability groups"
LESS use of pull-out special programs
LESS use of and reliance on standardized tests

MORE experiential, inductive, hands-on learning
MORE active learning in the classroom, with all the attendant noise and movement of students doing, talking, and collaborating
MORE emphasis on higher-order thinking; learning a field's key concepts and principles
MORE deep study of a smaller number of topics, so that students internalize the field's way of inquiry
MORE time devoted to reading whole, original, real books and mon-fiction materials
MORE responsibility transferred to students for their work: goal-setting, record-keeping, monitoring, evaluation
MORE choice for students; e.g., picking their own books, writing topics, team partners, research projects
MORE enacting and modeling of the principles of democracy in school

MORE attention to affective needs and the varying cognitive styles of individual students
MORE cooperative, collaborative activity; developing the classroom as an interdependent community
MORE heterogeneously grouped classrooms where individual needs are met through inherently individualized activities, not segregation of bodies
MORE delivery of special help to students in regular classrooms
MORE varied and cooperative roles for teachers, parents, and administrators
MORE reliance upon teachers' descriptive evaluation of student growth, including qualitative/anecdotal observations
(Anderson, et al., 1985; Bybee, et al., 1989 and 1991; Harste, 1989; Hillocks, 1986; National Council of Teachers of Mathematics, 1989; National Science Teachers Association, 1985; American Association for the Advancement of Science, 1989; National Commission on the Social Studies, 1988 and 1989)

In general, the purpose of public school in this country has always been to prepare students for life--to provide them with the skills necessary to be productive members of society. Students who leave school after a K-12 education should have a common core of knowledge and skills that will enable them to make decisions about the directions they will take as adults. This does not mean that every child, for example, must read and learn from the same book, but that children have skill in and understand the process of reading. There is little doubt that Celebration School provides a personalized learning environment which enables students to develop their individual skills and abilities to the fullest extent possible.

The purpose of this paper has been to provide readers with information in order that they may better understand the best practice educational concepts that are being used on a daily basis at Celebration School. Some have suggested that trying to implement so many new practices at a K-12 public school, all at the same time, would be difficult and that students would somehow not initially receive the quality of education that they might at a more conventional school. This certainly has not been the case at Celebration School. Most students have adjusted to the learner centered, responsibility model implemented at the school and are achieving at a high level. This can be confirmed by not only reviewing the scores from the standardized tests students took at the end of the first school year, but also viewing the quality of student portfolios. Certainly there will be some adjusting and readjusting of daily learning activities as students, teachers, and parents become comfortable with the learning environment, the responsibility model, the theme/project based curriculum, technology and the new methods of assessing learning. What ever the direction of the adjusting and readjusting, Celebration school offers a unique perspective in how schools are conceptualizing the elusive and often ambiguous idea of restructuring. Celebration is a "living Laboratory" that demonstrates how educators are translating the rhetoric of school restructuring into action.

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